



JPW

09/08/2005

39 Egerton Road
Bushbury
Wolverhampton
West Midlands
WV10 8AU
United Kingdom

Application number: 10/780,663

Filing date: 02/19/2004

First named inventor: Adrian Alexander Hubbard

Dear Sir/Madam,

I am writing to you regarding the above patent application, in reply to your non final action of 07/05/2005.

Please find attached a copy of amended claims for the above application, pages 5 to 6, also attached is a fully marked up copy of the amended claims, pages 11 to 12.

Vanmoor discloses an aerofoil section which has lower and upper surfaces defined by a mathematical curve, $x = \tan y$. Such a curve has a large vertical displacement, in the region 0.191: 1.0 step to chord ratio, and it maintains the same ratio when the chord length is changed. Please refer to figures 11A, 11B, 12A, 12B, 13A, and 13B attached. These drawings show that as the aerofoil chord increases for $x = \tan y$ curves, then the aerofoil step increases also, see figures 11A, 12A and 13A. The step provided by the curve $x = \tan y$ is too great and will cause the low pressure area above the wing to collapse and stall the aerofoil, see figure 14A, where 1 is the leading edge, 2 is the step, 3 is the trailing edge, 4 is the compression area, 5 is high pressure area and 7 is the collapsed low pressure area. The stepped aerofoil section does not need a mathematical curve for its surfaces and it is the vertical distance between the highest point of the leading edge and the rearmost point of the trailing edge that is important. Referring to figures